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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
KASRAIAN, ALLAHYAR	

ART UNIT	PAPER NUMBER
2617	

MAIL DATE	DELIVERY MODE
04/11/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/615,471	TSIEN ET AL.	
	Examiner	Art Unit	
	ALLAHYAR KASRAIAN	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 February 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-7,9-13,16,17 and 20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-7,9-13,16,17 and 20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *03/19/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Remarks

1. The present Office Action is in response to Applicant's amendment filed on Feb. 01, 2008. **Claims 1, 3-7, 9-13, 16, 17 and 20** are now pending in the present application. **This Action is made FINAL.**

Information Disclosure Statement

2. The information disclosure statement submitted on March 19, 2008 has been considered by the Examiner and made of record in the application file.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. **Claims 1 and 3-5** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Koohgoli et al. (U.S. Patent # 5,276,908)** (hereafter Koohgoli) in view of **Frixon (U.S. Patent # 5,138,456)**.

Consider **claim 1**, Koohgoli discloses a method, comprising:

scanning available channels;

measuring a received signal power level for the channels scanned in said scanning (FIGS. 3a, 3b, 4a and 4b, lines 3-5 of col. 7);

comparing the measured received signal power level to a threshold value to provide a difference (col. 7 lines 5-26);

if the difference is greater than a predetermined value, then indicating the channel as occupied, otherwise indicating the channel as available (col. 7 lines 5-26);

However, Koohgoli fails to disclose determining a larger gap between available channels; and selecting a channel within the larger gap.

In the same field of endeavor, Frixon discloses determining a larger gap between available channels; and selecting a channel within the larger gap (col. 4 lines 38-44).

Therefore, it would have been obvious to a person or ordinary skills in the art at the time the invention was made to incorporate channel selection by choosing a channel(s) within larger frequency spacing between available channels as taught by Frixon to the channel selecting method and apparatus shown by Koohgoli disclosed for purpose of reducing and preventing interference by selecting a channel having a distance from its neighboring channels to provide a guard band between frequency channels.

Consider **claim 3 as applied to claim 1 above**, Frixon discloses said selecting includes selecting a channel at a midpoint within the larger gap (col. 4 lines 38-44).

Consider **claim 4 as applied to claim 1 above**, Koohgoli as modified by Frixon disclose the claimed invention except in the event there are two or more larger gaps, selecting a larger gap at a higher frequency, wherein said selecting includes selecting a channel within the larger gap at a higher frequency.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to select a channel at higher frequency when there are two or more larger gaps presented. One of ordinary skill in the art would have expected applicant's invention to perform equally well with either selecting a channel at higher frequency or lower frequency when there are two or more larger gaps between channels presented because choosing either higher and lower frequency is a matter of Design Choice for the channels within close range of frequencies. Furthermore, applicant has not disclosed that selecting a channel at higher frequency provides an advantage, is used for a particular purpose, or solves a stated problem.

Consider **claim 5 as applied to claim 1 above**, Koohgoli as modified by Frixon disclose the claimed invention except in the event there are two or more larger gaps, selecting a larger gap at a higher frequency, wherein said selecting includes selecting a channel within a midpoint of the larger gap at a higher frequency.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to select a channel within a midpoint of the larger gap at a higher frequency when there are two or more larger gaps presented. One of ordinary skill in the art would have expected applicant's invention to perform equally well with either selecting a channel within midpoint of the larger gap at higher frequency or lower frequency when there are two or more larger gaps between channels presented because choosing either higher and lower frequency is a matter of Design Choice for the channels with close range of frequencies. Furthermore, applicant has not disclosed that selecting a channel at higher frequency provides an advantage, is used for a particular purpose, or solves a stated problem.

5. **Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Koohgoli et al. (U.S. Patent # 5,276,908)** (hereafter Koohgoli) in view of **Frixon (U.S. Patent # 5,138,456)** further in view of **Lopez (U.S. Patent # 7,177,291 B1)**.

Consider **claim 6 as applied to claim 1 above**, Koohgoli as modified by Frixon disclose the claim invention except determining whether a collision is detected at the channel selected in said selecting, and, if a collision is detected, selecting a new channel by executing the method again at said scanning.

In the same field of endeavor, Lopez clearly shows and discloses a method and apparatus for determining collision when selecting a channel, and in case of detecting collision in the selected channel, requesting a new channel and suggesting a new transmission channel (FIG. 2 and the summary of the invention in lines 46-67 of column 1 and lines 1-3 of column 2 where it particularly says, "in case of collision, transmission of a change of channel request to the first network…the change of channel request comprises…an identifier of…the number of times that request has been sent, a suggestion of transmission channel for the first network")

Therefore, it would have been obvious to a person with the ordinary skills in the art to apply the method and apparatus for detecting a collision in a selected channel and then requesting a new channel taught by Lopez in the channel selection method suggested by Koohgoli as modified by Frixon for purpose of transmitting data or signal on the best pre-examined available carrier channel. The proper motivation is to manage frequency channel resources.

6. **Claims 7 and 9-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Choi et al. (U.S. Patent # 7,206,840 B2)** (hereafter Choi) in view of **Frixon (U.S. Patent # 5,138,456)**.

Consider **claim 7**, Choi discloses an article comprising a storage medium having stored thereon instructions that, when executed by a computing platform, result in dynamic frequency selection in a wireless local area network by (FIG. 2, abstract, lines 64-67 of col. 3, and lines 7-12 of col. 4):

scanning available channels (FIG. 3 step 100: monitoring of channels; col. 4 lines 16-39);

measuring a received signal power level for the channels scanned in said scanning (abstract and col. 4 lines 40-67);

comparing the measured received signal power level to a threshold value to provide a difference (col. 6 lines 28-35 for threshold value -82dBm);

if the difference is greater than a predetermined value, then indicating the channel as occupied (lines 23-34 of col. 6 where it says, "the measurement of noise or interference level by 802.11 non-compliant devices…is detected and reported to the AP… The STA shall keep track of the CCA busy periods in order to report back the fractional period during which the CCA was busy out of the whole measurement duration."), otherwise indicating the channel as available (see FIG. 3 step 200: Selecting a New Channel By AP, and lines 11-13 of abstract where it says, "selecting one of the candidate channels based on the channel quality report for use in communication between the AP and the plurality of STAs");

However, Choi fails to disclose determining a larger gap between available channels; and selecting a channel within the larger gap.

In the same field of endeavor, Frixon discloses determining a larger gap between available channels; and selecting a channel within the larger gap (col. 4 lines 38-44).

Therefore, it would have been obvious to a person or ordinary skills in the art at the time the invention was made to incorporate channel selection by choosing a channel(s) within larger frequency spacing between available channels as taught by Frixon to the channel selecting method and apparatus shown by Choi disclosed for purpose of reducing and preventing

interference by selecting a channel having a distance from its neighboring channels to provide a guard band between frequency channels.

Consider **claim 9 as applied to claim 7 above**, Frixon discloses said selecting includes selecting a channel at a midpoint within the larger gap (col. 4 lines 38-44).

Consider **claim 10 as applied to claim 7 above,** Choi as modified by Frixon disclose the claimed invention except in the event there are two or more larger gaps, selecting a larger gap at a higher frequency, wherein said selecting includes selecting a channel within the larger gap at a higher frequency.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to select a channel at higher frequency when there are two or more larger gaps presented. One of ordinary skill in the art, would have expected applicant's invention to perform equally well with either selecting a channel at higher frequency or lower frequency when there are two or more larger gaps between channels presented because choosing either higher and lower frequency is a matter of Design Choice for the channels within close range of frequencies. Furthermore, applicant has not disclosed that selecting a channel at higher frequency provides an advantage, is used for a particular purpose, or solves a stated problem.

Consider **claim 11 as applied to claim 7 above**, Choi as modified by Frixon disclose the claimed invention except in the event there are two or more larger gaps, selecting a larger gap at

a higher frequency, wherein said selecting includes selecting a channel within a midpoint of the larger gap at a higher frequency.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to select a channel within a midpoint of the larger gap at a higher frequency when there are two or more larger gaps presented. One of ordinary skill in the art would have expected Applicant's invention to perform equally well with either selecting a channel within midpoint of the larger gap at higher frequency or lower frequency when there are two or more larger gaps between channels presented because choosing either higher and lower frequency is the matter of design choice for the channels within close range of frequencies. Furthermore, applicant has not disclosed that selecting a channel at higher frequency provides an advantage, is used for a particular purpose, or solves a stated problem.

7. **Claim 12** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Choi et al. (U.S. Patent # 7,206,840 B2)** (hereafter Choi) in view of **Frixon (U.S. Patent # 5,138,456)** further in view of **Lopez (U.S. Patent # 7,177,291 B1)**.

Consider **claim 12 as applied to claim 7 above**, Choi as modified by Frixon disclosed the claim invention except determining whether a collision is detected at the channel selected in said selecting, and, if a collision is detected, selecting a new channel by executing the method again at said scanning.

In the same field of endeavor, Lopez clearly shows and discloses a method and apparatus for determining collision when selecting a channel, and in case of detecting collision in the

selected channel, requesting a new channel and suggesting a new transmission channel (see FIG. 2 and the summary of the invention in lines 46-67 of column 1 and lines 1-3 of column 2 where it particularly says, "in case of collision, transmission of a change of channel request to the first network…the change of channel request comprises…an identifier of…the number of times that request has been sent, a suggestion of transmission channel for the first network")

Therefore, it would have been obvious to a person with the ordinary skills in the art to apply the method and apparatus for detecting a collision in a selected channel and then requesting a new channel taught by Lopez in the channel selection method suggested by Choi as modified by Raff for purpose of transmitting data or signal on the best pre-examined available carrier channel. The proper motivation is to manage frequency channel resources.

8. **Claims 13 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Choi et al. (U.S. Patent # 7,206,840)** (hereafter Choi) in view of **Sugar et al. (U.S. Patent # 7,248,604 B2)** (hereafter Sugar) further in view of **Frixon (U.S. Patent # 5,138,456)**.

Consider **claim 13**, Choi clearly shows and disclose an apparatus comprising:

a transceiver (see FIG. 2 transmitter/receiver 24); and

a baseband processor (considered as CPU) wherein is capable of dynamically selecting a frequency on which to communicate via said transceiver on a wireless local area network (FIG. 2 and lines 64-67 of column 3 where it says, "Both the AP and STA may include … a CPU 22, a transmitter/receiver 24, … a random access memory (RAM) 30, a read-only memory (32)", and lines 7-12 of column 4 where it says, "The CPU 22 operates under the control of an operating

system contained in the ROM 32 and utilizes RAM 30 to perform the frequency selection within a wireless local area network (WLAN), by enabling the AP to provide a new channel or wireless link for all stations (STAs) associated with its BSS.") by:

scanning available channels (FIG. 3 step 100: monitoring of channels; col. 4 lines 16-39);

measuring a received signal power level for the channels scanned in said scanning (abstract and col. 4 lines 40-67);

comparing the measured received signal power level to a threshold value to provide a difference (col. 6 lines 28-35 for threshold value -82dBm);

if the difference is greater than a predetermined value, then indicating the channel as occupied (lines 23-34 of col. 6 where it says, "the measurement of noise or interference level by 802.11 non-compliant devices…is detected and reported to the AP… The STA shall keep track of the CCA busy periods in order to report back the fractional period during which the CCA was busy out of the whole measurement duration."), otherwise indicating the channel as available (see FIG. 3 step 200: Selecting a New Channel By AP, and lines 11-13 of abstract where it says, "selecting one of the candidate channels based on the channel quality report for use in communication between the AP and the plurality of STAs");

However, Choi fails to disclose explicitly the CPU is a baseband processor or include a baseband processor.

In the same field of endeavor, Sugar clearly show and disclose an apparatus comprising a transceiver; and a baseband processor to couple to said transceiver (see FIG. 3 and lines 50-62 of col. 3)

Therefore, it would have been obvious to a person with the ordinary skills in the art to include a baseband processor in wireless communications apparatus taught by Sugar in the CPU of wireless apparatus disclosed by Choi for purpose of choosing wireless channels and processing the baseband signals in a wireless network.

However, Choi as modified by Sugar fail to disclose determining a larger gap between available channels; and selecting a channel within the larger gap.

In the same field of endeavor, Frixon discloses determining a larger gap between available channels; and selecting a channel within the larger gap (col. 4 lines 38-44).

Therefore, it would have been obvious to a person or ordinary skills in the art at the time the invention was made to incorporate channel selection by choosing a channel(s) within larger frequency spacing between available channels as taught by Frixon to the channel selecting method and apparatus shown by Choi as modified by Sugar for purpose of reducing and preventing interference by selecting a channel having a distance from its neighboring channels to provide a guard band between frequency channels.

However, Choi as modified by Sugar and further modified by Frixon fail to disclose in the event there are two or more larger gaps, selecting a larger gap at a higher frequency; and selecting a channel from a channel indicated as available within the larger gap at a higher frequency.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to select a channel at higher frequency when there are two or more larger gaps presented. One of ordinary skill in the art, would have expected applicant's invention to perform equally well with either selecting a channel at higher frequency or lower frequency when there

are two or more larger gaps between channels presented because choosing either higher and lower frequency is a matter of Design Choice for the channels within close range of frequencies. Furthermore, applicant has not disclosed that selecting a channel at higher frequency provides an advantage, is used for a particular purpose, or solves a stated problem.

Consider **claim 16 as applied to claim 13 above**, Choi as modified by Sugar further modified by Frixon disclosed said baseband processor is further capable of dynamically selecting a frequency on which to communicate via said transceiver by determining a larger gap between available channels (see Frixon, col. 4 lines 38-44).

However, Choi as modified by Sugar further modified by Frixon fails to disclose in the event there are two or more larger gaps, selecting a larger gap at a higher frequency, wherein said selecting includes selecting a channel within the larger gap at a higher frequency and wherein said selecting includes selecting a channel within a midpoint of the larger gap at a higher frequency.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to select a channel at higher frequency when there are two or more larger gaps presented. One of ordinary skill in the art, would have expected applicant's invention to perform equally well with either selecting a channel at higher frequency or lower frequency when there are two or more larger gaps between channels presented, or selecting a channel within midpoint of the larger gap at higher frequency or lower frequency when there are two or more larger gaps between channels presented because choosing either higher and lower frequency is a matter of Design Choice for the channels within close range of frequencies. Furthermore, applicant has not

disclosed that selecting a channel at higher frequency provides an advantage, is used for a particular purpose, or solves a stated problem.

9. **Claims 17 and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Choi et al. (U.S. Patent # 7,206,840)** (hereafter Choi) in view of **Sugar et al. (U.S. Patent # 7,248,604 B2)** (hereafter Sugar) further in view of **Pope, Jr. et al. (U.S. Patent # 6,654,616 B1)** (hereafter Pope) and further in view of **Frixon (U.S. Patent # 5,138,456)**.

Consider **claim 17**, Choi clearly shows and disclose an apparatus comprising:

a transceiver (see FIG. 2 transmitter/receiver 24); and

a baseband processor (considered as CPU) wherein is capable of dynamically selecting a frequency on which to communicate via said transceiver on a wireless local area network (FIG. 2 and lines 64-67 of column 3 where it says, "Both the AP and STA may include … a CPU 22, a transmitter/receiver 24, … a random access memory (RAM) 30, a read-only memory (32)", and lines 7-12 of column 4 where it says, "The CPU 22 operates under the control of an operating system contained in the ROM 32 and utilizes RAM 30 to perform the frequency selection within a wireless local area network (WLAN), by enabling the AP to provide a new channel or wireless link for all stations (STAs) associated with its BSS.") by:

scanning available channels (FIG. 3 step 100: monitoring of channels; col. 4 lines 16-39);

measuring a received signal power level for the channels scanned in said scanning (abstract and col. 4 lines 40-67);

comparing the measured received signal power level to a threshold value to provide a difference (col. 6 lines 28-35 for threshold value -82dBm);

if the difference is greater than a predetermined value, then indicating the channel as occupied (lines 23-34 of col. 6 where it says, "the measurement of noise or interference level by 802.11 non-compliant devices…is detected and reported to the AP… The STA shall keep track of the CCA busy periods in order to report back the fractional period during which the CCA was busy out of the whole measurement duration."), otherwise indicating the channel as available (see FIG. 3 step 200: Selecting a New Channel By AP, and lines 11-13 of abstract where it says, "selecting one of the candidate channels based on the channel quality report for use in communication between the AP and the plurality of STAs");

However, Choi fails to disclose explicitly the CPU is a baseband processor or include a baseband processor.

In the same field of endeavor, Sugar clearly show and disclose an apparatus comprising a transceiver; and a baseband processor to couple to said transceiver (see FIG. 3 and lines 50-62 of col. 3)

Therefore, it would have been obvious to a person with the ordinary skills in the art to include a baseband processor in wireless communications apparatus taught by Sugar in the CPU of wireless apparatus disclosed by Choi for purpose of choosing wireless channels and processing the baseband signals in a wireless network.

However, Choi as modified by Sugar fail to disclose the apparatus comprises an omnidirectional antenna.

In the same field of endeavor, Pope clearly shows and discloses an omnidirectional antenna with a wireless local area transceiver (FIG. 1, FIG. 2 and lines 29-36 of col. 4)

Therefore, it would have been obvious to a person with ordinary skills in the art to include an omnidirectional antenna as taught by Pope to the wireless local area network method and apparatus as displayed by Choi as modified by Sugar for purpose of transmitting/receiving signal with a better SNR gain in a wireless communication network. The proper motivation is to select the optimum frequency channels.

However, Choi as modified by Sugar and further modified by Pope fail to disclose determining a larger gap between available channels; and selecting a channel within the larger gap.

In the same field of endeavor, Frixon discloses determining a larger gap between available channels; and selecting a channel within the larger gap (col. 4 lines 38-44).

Therefore, it would have been obvious to a person or ordinary skills in the art at the time the invention was made to incorporate channel selection by choosing a channel(s) within larger frequency spacing between available channels as taught by Frixon to the channel selecting method and apparatus shown by Choi as modified by Sugar and further modified by Pope for purpose of reducing and preventing interference by selecting a channel having a distance from its neighboring channels to provide a guard band between frequency channels.

However, Choi as modified by Sugar modified by Pope and further modified by Frixon fail to disclose in the event there are two or more larger gaps, selecting a larger gap at a higher frequency; and selecting a channel from a channel indicated as available within the larger gap at a higher frequency.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to select a channel at higher frequency when there are two or more larger gaps presented. One of ordinary skill in the art, would have expected applicant's invention to perform equally well with either selecting a channel at higher frequency or lower frequency when there are two or more larger gaps between channels presented because choosing either higher and lower frequency is a matter of Design Choice for the channels within close range of frequencies. Furthermore, applicant has not disclosed that selecting a channel at higher frequency provides an advantage, is used for a particular purpose, or solves a stated problem.

Consider **claim 20 as applied to claim 17 above**, Choi as modified by Sugar modified by Pope and further modified by Frixon disclosed said baseband processor is further capable of dynamically selecting a frequency on which to communicate via said transceiver by determining a larger gap between available channels (see Frixon, col. 4 lines 38-44).

However, Choi as modified by Sugar modified by Pope and further modified by Frixon fails to disclose in the event there are two or more larger gaps, selecting a larger gap at a higher frequency, wherein said selecting includes selecting a channel within the larger gap at a higher frequency and wherein said selecting includes selecting a channel within a midpoint of the larger gap at a higher frequency.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to select a channel at higher frequency when there are two or more larger gaps presented. One of ordinary skill in the art, would have expected applicant's invention to perform equally well with either selecting a channel at higher frequency or lower frequency when there

are two or more larger gaps between channels presented, or selecting a channel within midpoint of the larger gap at higher frequency or lower frequency when there are two or more larger gaps between channels presented because choosing either higher and lower frequency is a matter of Design Choice for the channels within close range of frequencies. Furthermore, applicant has not disclosed that selecting a channel at higher frequency provides an advantage, is used for a particular purpose, or solves a stated problem.

Response to Arguments

10. Applicant's arguments with respect to claims 1, 3-7, 9-13, 16, 17 and 20 have been considered but are moot in view of the new ground(s) of rejection.

Examiner is persuaded Raaf (US Patent # 6785514) does not include the limitation, "selecting a channel within the larger gap" in claims 1 and 7.

Applicant argues that Frixon and Lopez are different from Koohgoli and Choi and one skilled in the art would have not been motivated to combine the references. Examiner respectfully disagrees since Frixon discloses selecting an emission frequency in the middle of the largest interval separating two channels. Since Frixon discloses how to select a channel frequency (regardless of the channel selection method is used for a video camera or mobile base station or WLAN), it can be used for modifying Koohgoli and Choi for selecting a carrier frequency. Therefore it would have been obvious for one skilled in the art to modify Koohgoli or Choi by Frixon.

Examiner respectfully disagrees with the Applicant's argument that Lopez does not disclose the new channel selection is as result of a scan of available channel. Since Koohgoli and

Choi disclose scanning available channels, it is obvious to one of ordinary skilled in the art to combine Koohgoli or Choi with Lopez because Lopez discloses selecting a new channel based on detection of collision. It is inherently taught that Lopez uses the new channel within available channels. Therefore it would have been obvious for one skilled in the art to modify Koohgoli or Choi by Frixon and Lopez, alone or in combination of both references.

Conclusion

11. Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to**:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

12. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Allahyar Kasraian whose telephone number is (571) 270-1772. The Examiner can normally be reached on Monday-Thursday from 8:00 a.m. to 5:00 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Rafael Pérez-Gutiérrez can be reached on (571) 272-7915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 571-272-4100.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

/Allahyar Kasraian/

Examiner, Art Unit 2617

A.K./ak

April 8, 2008

/Rafael Pérez-Gutiérrez/
Supervisory Patent Examiner, Art Unit 2617